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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,845	06/15/2001	Doug Grumann	10002695-1	8777

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

TRUONG, LECHI

ART UNIT	PAPER NUMBER
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2194

MAIL DATE	DELIVERY MODE
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06/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/882,845	Applicant(s) GRUMANN, DOUG	
	Examiner LECHI TRUONG	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-26 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-3, 5-15, 17-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al (US. Patent 6,059,842) in view of Clare et al (US. Patent 6,432,985 B1).

3. **As to claim 1**, Dumarot teaches the invention substantially as claimed including:
electronically deriving relationships (the optimizer contains rules 330, 341, 351 that it uses to makes such optimizations 330, 340 and recommendations 350. For example, If A1=yes, and S1=200 MHz, or Mi=90%, then make suggestion and change the graphic card settings that control “synchronization on vertical refresh”, col 7, ln 25-35/ comparing actual system/ application setting with recommend setting, col 7, ln 5-16), over time (changes to system and application configurations at different points in time, in evaluating the effects of changing application setting and in comparing actual system/application settings with recommended setting, col 7, ln 10-16/ at specific increments of time, col 5, ln 10-17), monitored variable/ performance (dynamically monitoring system behavior an performance, col 3, ln 16-22/ the optimizer 136 monitors system 12 behavior/ col 5, ln 47-55/ optimizer 136 gathers relevant system information/ relevant

application information, col 5, ln 30-46), generating a number of rules based on said derived relationship(the optimizer contains rules 330, 341, 351 that it uses to makes such optimizations 330, 340 and recommendations 350. For example, If A1=yes, and S1 =200 MHz, or Mi=90%, then make suggestion and change the graphic card settings that control “synchronization on vertical refresh”, col 7, ln 25-35/ if A and B are true and C is false then make suggestion and take action, col 7, ln 30-35 /a rule may be: if A1= yes, S1=200 MHz or M1 = 90%, the rules is if A and B are true then C is false, col 7, ln 27-30/ ln 33-36), adjusting at least one of said system variable based on said generated number of rules (If A1 = yes, and S1 = 200MHz, or M1 = 90%, then make the suggestion and change the graphic car settings, col 7, ln 25-30/ parameter A1 may control the graphical quality of an engineering application’s 3 D graphics. Lower graphical quality often implies farther use of an application. System setting 440(Fig. 4) contain information usually relating to static qualities of the computer system such the particular operating system, amount of memory, processor speed, graphics card name, and bios version, col 4, ln53-67 to col 5, ln 1-4), to enhance the performance (col 3, ln 10-25).

4. Dumarot does not teach automatically generating rules without requiring human interaction, deriving relationship over time. However, Clare teaches automatically generating rules without requiring human interaction, deriving relationship over time (a numerical relationship between change in torque factor and change in temperature (G) for the voice coil motor, combined with the torque factor adjustment and temperature at/near the voice coil motor measured at a first time (for example during the initial start-up of the disk drive during the automatic recalibrations that is performed during a start-up)[over time], AF.sub.RECAL and T.sub.RECAL respectively, to determine an adjustment factor (AF.sub.EVENT) that is used to

Art Unit: 2195

adjust the most recent K.sub.T curve for temperature changes during operation, co, 2, ln 59-66/
this relationship between the voice coil motor K.sub.T curve and temperature change (G), and
combines it with temperature data taken at various times [over timer]to compensate the K.sub.T
used in seek algorithms to increase seek performance and reliability without having to perform a
recalibration of the disk drive 100, col 5, ln 53-56/ since Chare does not teach determine
relationship with human interaction, this relationship is automatically generated without
requiring the human interaction).

5. It would have been obvious to one of the ordinary skill in the art at the time the invention
was made to combine the teaching of Dumarot with Clare to incorporate the features of
automatically generating rules without requiring human interaction, deriving relationship over
time because this increases seek performance and reduces the overall performance of the disk
drive.

6. **As to claim 2**, Dumarot teaches at least in part on a performance goal (optimizing
software, col 3, ln 10-45/ optimizing system performance, col 4, ln 56-67/col 5, ln 1-25/ col 6, ln
7-55/ col 7, ln 1-67/ col 8, ln 8-57).

7. **As to claim 3**, Dumarot teaches part on current values of said system variable (a set of
control parameters A1, A2, col 4, ln 56-67/col 5, ln 1-25/ col 7, ln 1-67/ color 570, col 8, ln 7-
60), recommend (recommendation 350, col 7, ln 1-67).

8. **As to claim 5**, Dumarot teaches acquired data (values M1, M2.. is obtained, col 5, ln 1-
25).

Art Unit: 2195

9. **As to claim 6**, Dumarot teaches data over time (specific increments of time, col 5, ln 1-25), gathering said data (the information gathered, col 7, ln 1-67), logging/ logged data (threshold distance/ (X1, X2), col 9, ln 1-40), relationship (X1, Y1, col 9, ln 1-40).
10. **As to claim 7**, Dumarot teaches discrete points in time (different points in time, col 7, ln 1-67).
11. **As to claim 8**, Dumarot teaches an event (system behavior, col 5, ln 1-25).
12. **As to claim 9**, Dumarot teaches performance of metric data (performance, col 5, ln 1-25).
13. **As to claim 10**, Dumarot teaches identifying a number of applications (a particular unique identifier 410 for a software application, col 4, ln 56-67/ col 5, ln 1-25).
14. **As to claim 11**, Dumarot teaches variable (parameter, A1, A2..., col 4, ln 56-67) , the performance of said computer (increasing the apparent speed of computer, col 3, ln 9-15).
15. **As to claim 12**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above.
16. **As to claim 13**, Dumarot teaches performance metrics (performance, col 5, ln 1-25).
17. **As to claim 14**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above.
18. **As to claim 15**, Dumarot teaches performance goal (performance, col 5, ln 1-25).
19. **As to claim 17**, it is an apparatus claim of claim 5; therefore, it is rejected for the same reason as claim 5 above.
20. **As to claim 18**, Dumarot teaches a configuration file (amount of memory, col 5, ln 1-25).
21. **As to claim 19**, Dumarot teaches monitoring (monitor program 137, col 5, ln 1-67).

22. **As to claims 20-26**, they are apparatus claims of claims 9-10, 1, 5, 6; therefore, they are rejected for the same reasons as claims 9-10, 1, 5, and 6 above.

23. Claims **4, 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al (US. Patent 6,059,842) of Clare et al (US. Patent 6,432,985 B1), as applied to claim 1 above, and in view of Mihata (design rule verifying system).

24. **As to claim 4**, Dumarot and Clare do not teach iterative. However, Mihata teaches iterative (the contradictory design rule are repeated, page 1).

25. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Dumarot, Clare and Mihata because Mihata's iterative would improves the efficiency of Dumarot and Clare's systems by allowing the system to repeat the prior step of the correcting work.

26. **As to claim 16**, it is an apparatus claim of claim 4; therefore, it is rejected for the same reason as claim 4 above.

Response to the argument

27. Applicant amendment filed on 03/12/2008 has been considered but they are not persuasive.

In the remarks, applicant argued in substance

(1) "Applicants do not understand how Dumarot teaches" electronically deriving relationships over time between monitored system variable and monitored performance of said computer system; automatically generating a number of rules based on said derived

Art Unit: 2195

relationships, wherein said number of rules are generated without requiring human interaction; and adjusting at least one of said system variables based on said generated number of rules to enhance the performance of said computer”.

(2) “Applicants do not understand how Clare teaches “electronically deriving relationships over time between monitored system variables and monitored performance of said computer system”.

28. Examiner respectfully traversed Applicant’ s remarks:

As to claim 1, Dumarot teaches the optimizer contains rules 330, 341, 351 that it uses to makes such optimizations 330, 340 and recommendations 350. For example, If A1=yes, and S1 =200 MHz, or Mi=90%, then make suggestion and change the graphic card settings that control “synchronization on vertical refresh” (col 7, ln 25-35)/ comparing actual system/ application setting with recommend setting (col 7, ln 5-16)/ the optimizer contains rules 330, 341, 351 that it uses to makes such optimizations 330, 340 and recommendations 350. For example, If A1=yes, and S1 =200 MHz, or Mi=90%, then make suggestion and change the graphic card settings that control “synchronization on vertical refresh”, col 7, ln 25-35/ if A and B are true and C is false then make suggestion and take action, col 7, ln 30-35 /a rule may be: if A1= yes, S1=200 MHz or M1 = 90%, the rules is if A and B are true then C is false, col 7, ln 27-30/ ln 33-36), adjusting at least one of said system variable based on said generated number of rules (If A1 = yes, and S1 = 200MHz, or M1 = 90%, then make the suggestion and change the graphic car settings, col 7, ln 25-30/ parameter A1 may control the graphical quality of an engineering application’s 3 D graphics. Lower graphical quality often implies farther use of an application. System setting

440(Fig. 4) contain information usually relating to static qualities of the computer system such the particular operating system, amount of memory, processor speed, graphics card name, and bios version(col 4, ln53-67 to col 5, ln 1-4/ col 3, ln 10-25).

As to the point(2), See the above point (1) answer, Dumarot teaches “electronically deriving relationships over time between monitored system variables and monitored performance of said computer system”, and Clare teaches a numerical relationship between change in torque factor and change in temperature (G) for the voice coil motor, combined with the torque factor adjustment and temperature at/near the voice coil motor measured at a first time (for example during the initial start-up of the disk drive during the automatic recalibrations that is performed during a start-up)[over time], AF.sub.RECAL and T.sub.RECAL respectively, to determine an adjustment factor (AF.sub.EVENT) that is used to adjust the most recent K.sub.T curve for temperature changes during operation, (col, 2, ln 59-66)/ this relationship between the voice coil motor K.sub.T curve and temperature change (G), and combines it with temperature data taken at various times [over timer]to compensate the K.sub.T used in seek algorithms to increase seek performance and reliability without having to perform a recalibration of the disk drive 100,(col 5, ln 53-56)/ since Chare does not teach determine relationship with human interaction, this relationship is automatically generated without requiring the human interaction).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272-3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Application/Control Number: 09/882,845
Art Unit: 2195

Page 10

LeChi Truong

June 5, 2008

/Meng-Ai An/

Supervisory Patent Examiner, Art Unit 2195